

Detailing Business Data Requirements and Storytelling

3 Days | Virtual and Face-to-Face

Missing a critical piece of data or incorrectly defining a data element contributes to the majority of maintenance problems and results in systems that do not reflect or support the business needs. Business users often fail to articulate their business data needs because they are so inherent in their work that it is difficult to uniquely identify each data requirement. A business analyst, skilled in data elicitation and definition, can save the business significant time and cost for any project.

This course teaches students an in-depth approach to data modeling: identifying and defining all necessary data components using both textual templates and an entity relationship diagram. This course teaches business analysis techniques for eliciting, analyzing, and documenting data requirements to both new and experienced practitioners. The culmination of the course provides students with the tools and techniques of data story-telling, which is key to the success of data analytics.

Students will be given data templates with a suggested documentation structure for defining Business Data Requirements. It supports and expands on the techniques in the IIBA BABOK® Guide. Mentor-led workshops require students to practice the techniques as they learn. Students are encouraged to bring their own projects to class. Identify core data requirements beginning with project initiation.

Learning Objectives

- Identify relationships between data elements and their impact on the business
- Identify excellent data requirements at the appropriate level of detail
- Detail the data requirements (using a data dictionary and data model)
- Detail complex data related business rules
- Use data requirements to verify and communicate a more complete understanding of the business domain
- Assist with the transition of business data to database design
- Utilize easy normalization techniques (without all the mathematical theory)
- Validate data requirements with activity (process or use case) requirements

Even if your organization has a data administrator or data warehouse team who is responsible for documenting and managing the organization's information needs, every project uses a subset of that enterprise information in its own unique way. Business analysts must understand the importance of data in all of their projects and include data requirements in their business requirements documentation. Failing to document which data elements need to be used in a calculation, or displayed on a report, leaves the developer the responsibility of choosing the correct pieces of business data from hundreds if not thousands of available fields. These missing requirements often lead to expensive and lengthy project delays during the testing phase.

Intended Audience

This course is designed for business analysts, project managers, systems analysts, data administrators, database administrators, or any other project team member practicing business analysis. This course may also be appropriate for individuals who manage or mentor business analysts.

Prerequisites

We recommend that students first attend our Essential Skills for Business Analysis class or have experience in project scope definition, gathering requirements from subject matter experts, and understand how business requirements fit into the entire systems development effort.

Learning Topics

Topic

Introduction

- What is business data and how do data requirements support your project solution?
- What is the difference between business data and database design?
- Review the 7 characteristics of "excellent" requirements.

Entities and Attributes

- Review the project initiation and scope analysis to identify initial business data needs.
- Understand the basic building blocks of the business data: entities, attributes, and relationships.
- Learn to define entities and attributes with business goals in mind. Utilize suggested naming guidelines for consistency and readability.
- Identify critical attributes for each entity highlighting their data types, valid values and other attribute characteristics.
- Discuss entity unique identifiers.
- Differentiate unique business facts within a given attribute.
- Workshop using case study to identify and detail entities and attributes.

Entity Relationships and Diagramming Conventions

- Learn how business data requirements are displayed in an entity relationship diagram.
- Detect the business rules of data by identifying key relationships between entities.
- Define relationships and business rules in more detail using naming conventions. Learn relationship cardinalities and understand their impact on your solution functionality.
- Review common diagram notations for data related business rules.
- Workshop to identify and detail entity relationships. Create a logical entity relationship diagram that accurately reflects the business domain.

Detailing the Data Requirements

- Detail repeating data elements. Break down attributes into their components using proper naming conventions and clearly document the requirements with example data values.
- Identify and define advanced entity types to drive effective analysis.
- Detail complex data business rules and identify additional attributes to describe the business relationships (many to many relationships).
- Detail and differentiate between sub-type entities.
- Review techniques for documenting data conversion requirements, interface requirements and performing gap analysis.
- Workshop to refine and update the entity relationship diagram to reflect newly discovered data requirements.

Transition from Business Data to a Physical Design

- Learn how to verify your data model to identify missing or incomplete requirements
- Learn how business data transitions into a database design

Workshop - Identify and document complete data requirements for a new case study (Student's projects may be used for this workshop.)

- Identify and document entities.
- Identify and document attributes.
- Identify and document data related business rules.

Data Storytelling

- Understand the concept of context around data
- Learn to distinguish between exploratory and explanatory data analysis
- Learn how to capture attention and focus your intent with data
- Review the basic types of charts and graphs that most effectively tell your story

Appendix - Data Normalization

- What is data normalization and why is it important?
- What are the rules of normalization?



This class is a part of the B2T Training Business Analyst Certification Program.

For more information on the program of the B2T Training Business Analyst Certification Program.